



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
Re: Appeal to the Board of Patent Appeals and Interferences

APR 18 2008
JFW

In re PATENT application of
DENBAR et al.

Group Art Unit: 2616

Application No. 09/800,476

Examiner: SEFCHECK, Gregory B

Filed: March 8, 2001

Docket : 95-462

Title: APPLICATION SERVER HAVING ASYNCHRONOUS EVENT MANAGER CONFIGURED FOR
TERMINATING MESSAGING OPERATIONS AND ROLLING BACK PRESCRIBED DATA
STRUCTURES

Date: October 2, 2007

Commissioner of Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

- 1 ☐ **NOTICE OF APPEAL:** Applicant hereby appeals to the Board of Patent Appeals and Interferences from (not Advisory Action) dated April 3, 200.
[] ATTACHED: Pre-Appeal Brief Request for Review
- 2 ☒ **BRIEF** on appeal in this application attached.
- 3 ☐ An **ORAL HEARING** is respectfully requested under Rule 194 (due two months after Examiner's Answer unextendable).
- 4 ☐ Reply Brief is attached (due two months after Examiner's Answer -- unextendable).

5. FEE CALCULATION:		Large/Small Entity	
If box 1 above is X'd, see box 12 below <u>first</u> and decide: enter		\$510/250*	\$
If box 2 above is X'd, see box 12 below <u>first</u> and decide: enter		\$510/250*	\$ 510.00
If box 3 above is X'd, see box 12 below <u>first</u> and decide: enter		\$1000/500*	\$
If box 4 above is X'd, enter nothing		- 0 - (no fee)	
6. Original due date: September 3, 2007			
7. Petition is hereby made to extend the original due date to cover the date this response is filed for which the requisite fee is attached		(1 mo) \$120 (2mos) \$460 (3mos) \$1050 (4mos) \$1640	+120
8. Enter any previous extension fee paid [] previously since above original due date (item 6); [] with concurrently filed amendment		-	
9. Subtract line 8 from line 7 and enter: Total Extension Fee		10/02/2007 HAMMER 0000031260000476	4630
10. TOTAL FEE ATTACHED =			\$ 630.00

11. ☐ *Fee **NOT** required if/since paid in prior appeal in which the Board of Patent Appeals and Interferences did not render a decision on the merits.

CHARGE STATEMENT: The Commissioner is hereby authorized to charge any fee specifically authorized hereafter, or any missing or insufficient fee(s) filed, or asserted to be filed, or which should have been filed herewith or concerning any paper filed hereafter, and which may be required under Rules 16-18 (missing or insufficient fee only) now or hereafter relative to this application and the resulting Official document under Rule 20, or credit any overpayment, to our Account/Order No. 50-1130 / 95-462 for which purpose a duplicate copy of this sheet is attached. This CHARGE STATEMENT does not authorize charge of the issue fee until/unless an issue fee transmittal form is filed

Atty: LR
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Docket No.: 95-462

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of

DENBAR et al.

Serial No.: 09/800,476

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Filed: March 8, 2001

Examiner: SEFCHECK, Gregory B

For: APPLICATION SERVER HAVING ASYNCHRONOUS EVENT MANAGER
CONFIGURED FOR TERMINATING MESSAGING OPERATIONS AND ROLLING
BACK PRESCRIBED DATA STRUCTURES

MAIL STOP: APPEAL BRIEF – PATENTS

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

APPEAL BRIEF

Sir:

This is an appeal from the final rejection of claims 1-3, 5-22, 24-29, 35-37, 39-41, and 43-53 in the above-identified patent application. Applicant concurrently petitions for a 1-month extension of time under 37 CFR 1.136 and 37 C.F.R. 41.37(e).

This Appeal Brief is submitted as required by 37 C.F.R. §41.37.

1. Real Party in Interest:

This application is assigned to Cisco Technology, Inc., the real party of interest.

2. Related Appeals and Interferences:

There are no other appeals or interferences known to Appellant that will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

Appeal Brief filed October 2, 2007

Appln No. 09/800,476

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3. Status of Claims:

Claims 1-3, 5-22, 24-29, 35-37, and 39-41, and 43-53 are pending in this application. Claims 1-3, 5-22, 24-29, 35-37, and 39-41, and 43-53 stand rejected by the Examiner, and claims 1-3, 5-22, 24-29, 35-37, and 39-41, and 43-53 are appealed.

4. Status of any Amendment File Subsequent to Final Rejection:

No Amendment was filed in response to the Final Rejection mailed April 3, 2007. A Response to the Final Rejection was filed on June 4, 2007.

5. Summary of Claimed Subject Matter:

The claimed subject matter includes independent claims 1, 11, 16, 20, 35, 45, and 53.

Independent claim 1 specifies a method in an application server (18 of Fig. 1; page 7, lines 18-21), the method comprising receiving (122, 124 of Fig. 2A; 50 of Fig. 3; page 9, lines 15-17), by the application server, an initiation request (50 of Fig. 3, page 9, lines 13-16) from a gateway (12 of Fig. 1) configured for receiving incoming Voice over IP calls (page 7, lines 13-17), including receiving the initiation request via a Voice over IP call control channel (20 of Fig. 1; page 7, line 26 to page 8, line 2) between the application server and the gateway; initiating by the application server an instance of an application process configured for executing a prescribed sequence of messaging operations for a first type of incoming message (124, 126, 128, 130 of Fig. 2A; 52, 54, 56b, 58a, 60b of Fig. 3; page 9, line 17 to page 11, line 1), in response to reception of the initiation request, the initiating including writing first data, having been received from the gateway via a Voice over IP media channel, into a first data structure that identifies information based on execution of the instance (126, 130 of Fig. 2A; page 9, line 24 to page 10, line 5; page 10, line 26 to page 11, line 1); selectively setting (134 of Fig. 2A; page 8, lines 23-28; page 11, line 18 to page 12, line 1) by the application server a prescribed variable based on receiving a reject message from the gateway via the Voice over IP call control channel (132 of Fig. 2A, 64 of Fig. 3; page 8, lines 24-28; page 11, lines 8-11); and selectively terminating (136, 138, 142, 144, 146 of Fig. 2B; 66 of Fig. 3; page 11, lines 5-8; page 11, line 18 to page 12, line

9), by the application server, the instance prior to completing the sequence of messaging operations based on detecting, at a prescribed location in the prescribed sequence (136 of Fig. 2B), the prescribed variable set during execution of the instance and that specifies the prescribed sequence of message operations are not to be performed based on the prescribed variable having been set to specify that the incoming message corresponds to a second message type incompatible with the first type ("Fax Detect=True" in 134 of Fig. 2A), the selectively terminating including terminating execution of the operations subsequent to the prescribed location (146 of Fig. 2B) and removing the first data from the first data structure (142 of Fig. 2B).

Independent claim 11 specifies a method in a communications system (10 of Fig. 1) having a gateway (12 of Fig. 1) configured for receiving incoming calls and an application server (18 of Fig. 1; page 7, lines 10-17), the method comprising sending a request (122 of Fig. 2A, 50 of Fig. 3; page 9, lines 12-17) by the gateway to the application server for initiating a messaging session according to a first message type in response to receiving an incoming Voice over IP call (120 of Fig. 2A; page 7, lines 13-17; page 8, lines 9-11); initiating by the application server an instance of an application process configured for executing a prescribed sequence of messaging operations for generation of the messaging session (124, 126, 128, 130 of Fig. 2A; 52, 54, 56b, 58a, 60b of Fig. 3; page 9, line 17 to page 11, line 1), including writing first data into a first data structure that identifies information based on execution of the instance (126, 130 of Fig. 2A; page 9, line 24 to page 10, line 5; page 10, line 26 to page 11, line 1); detecting (132 of Fig. 2A; page 11, lines 5-12) by the gateway, following sending the request, that the incoming Voice over IP call corresponds to a second message type incompatible with the first message type and in response sending a reject message to the application server (132 of Fig. 2A; 64 of Fig. 3; page 6, lines 23-27; page 8, lines 13-17; page 11, lines 5-12); and terminating the instance (136, 138, 142, 144, 146 of Fig. 2B; 66 of Fig. 3; page 11, lines 5-8; page 11, line 18 to page 12, line 9), prior to completion of executing the prescribed sequence of messaging operations by the application server in response to the reject message, including removing the first data from the first data structure (142 of Fig. 2B).

Claim 12 depends from claim 11, wherein the sending includes sending a second request, concurrently with sending the request for initiating the messaging session according to the first message type, for initiation of a messaging session according to the second message type in response to receiving the incoming Voice over IP call (122 of Fig. 2A; page 8, lines 9-14; page 9, lines 13-15; page 12, lines 10-13).

Independent claim 16 specifies a communications system (10 of Fig. 1; page 7, lines 10-17) comprising: a gateway (12 of Fig. 1; page 7, lines 13-17) configured for receiving (120 of Fig. 2A; page 8, lines 9-11; page 9, lines 12-13) an incoming Voice over IP call and in response sending first (50 of Fig. 3) and second requests for concurrent initiation of messaging sessions according to respective first and second message types (122 of Fig. 2A; page 8, lines 9-14; page 9, lines 13-17; page 12, lines 10-16), the gateway configured for generating a reject message (64 of Fig. 3; page 11, lines 5-12) in response to detecting that the incoming Voice over IP call corresponds to the second message type incompatible with the first message type (132 of Fig. 2A; 64 of Fig. 3; page 6, lines 23-27; page 8, lines 13-17; page 11, lines 5-12); and an application server (18 of Fig. 1; page 7, lines 17-21) configured for initiating (126 of Fig. 2A; page 9, lines 17-22), in response to the first request (50 of Fig. 3), an instance of an application process configured for executing a prescribed sequence of messaging operations for generation of the messaging session according to the first message type (124, 126, 128, 130 of Fig. 2A; 52, 54, 56b, 58a, 60b of Fig. 3; page 9, line 17 to page 11, line 1), the application server configured for writing first data into a first data structure that identifies information based on execution of the instance (126, 130 of Fig. 2A; page 9, line 24 to page 10, line 5; page 10, line 26 to page 11, line 1), the application server having an asynchronous event manager (30 of Fig. 1) configured for causing termination of the instance, including removal of the first data from the data structure, prior to completion of executing the prescribed sequence of messaging operations, in response to reception of the reject message (134 of Fig. 2A; 136, 138, 142, 144, 146 of Fig. 2B; 66 of Fig. 3; page 11, lines 5-8; page 11, line 18 to page 12, line 9).

Independent claim 20 specifies a computer readable medium having stored thereon sequences of instructions for an application server (18 of Fig. 1; page 7, lines 18-21) to execute a

messaging session, the sequences of instructions including instructions for performing the steps of (122, 124 of Fig. 2A; 50 of Fig. 3; page 9, lines 15-17), by the application server, an initiation request (50 of Fig. 3, page 9, lines 13-16) from a gateway (12 of Fig. 1) configured for receiving incoming Voice over IP calls (page 7, lines 13-17), including receiving the initiation request via a Voice over IP call control channel (20 of Fig. 1; page 7, line 26 to page 8, line 2) between the application server and the gateway; initiating by the application server an instance of an application process configured for executing a prescribed sequence of messaging operations for a first type of incoming message (124, 126, 128, 130 of Fig. 2A; 52, 54, 56b, 58a, 60b of Fig. 3; page 9, line 17 to page 11, line 1), in response to reception of the initiation request, the initiating step including writing first data, having been received from the gateway via a Voice over IP media channel, into a first data structure that identifies information based on execution of the instance (126, 130 of Fig. 2A; page 9, line 24 to page 10, line 5; page 10, line 26 to page 11, line 1); selectively setting (134 of Fig. 2A; page 8, lines 23-28; page 11, line 18 to page 12, line 1) by the application server a prescribed variable based on receiving a reject message from the gateway via the Voice over IP call control channel (132 of Fig. 2A, 64 of Fig. 3; page 8, lines 24-28; page 11, lines 8-11); and selectively terminating (136, 138, 142, 144, 146 of Fig. 2B; 66 of Fig. 3; page 11, lines 5-8; page 11, line 18 to page 12, line 9), by the application server, the instance prior to completing the sequence of messaging operations based on detecting, at a prescribed location in the prescribed sequence (136 of Fig. 2B), the prescribed variable set during execution of the instance and that specifies the prescribed sequence of message operations are not to be performed based on the prescribed variable having been set to specify that the incoming message corresponds to a second message type incompatible with the first type ("Fax Detect=True" in 134 of Fig. 2A), the selectively terminating step including terminating execution of the operations subsequent to the prescribed location (146 of Fig. 2B) and removing the first data from the first data structure (142 of Fig. 2B).

Independent claim 35 specifies an application server for executing a messaging application, the application server including means (40 of Fig. 1; page 7, lines 26-28) for receiving (122, 124 of Fig. 2A; 50 of Fig. 3; page 9, lines 15-17) an initiation request (50 of Fig.

3, page 9, lines 13-16) and first data from a gateway (12 of Fig. 1) configured for receiving incoming Voice over IP calls (page 7, lines 13-17), the means for receiving configured for receiving the initiation request via a Voice over IP call control channel (20 of Fig. 1; page 7, line 26 to page 8, line 2) between the application server and the gateway, and the first data via a Voice over IP media channel between the application server and the gateway; means for initiating (18 of Fig. 1) an instance of an application process configured for executing a prescribed sequence of messaging operations for a first type of incoming message (124, 126, 128, 130 of Fig. 2A; 52, 54, 56b, 58a, 60b of Fig. 3; page 9, line 17 to page 11, line 1), in response to reception of the initiation request by the means for receiving of the application server, the means for initiating configured for writing the first data into a first data structure that identifies information based on execution of the instance (126, 130 of Fig. 2A; page 9, line 24 to page 10, line 5; page 10, line 26 to page 11, line 1); and means (30 of Fig. 1) for selectively setting (134 of Fig. 2A; page 8, lines 23-28; page 11, line 18 to page 12, line 1) a prescribed variable based on the application server receiving a reject message from the gateway via the Voice over IP call control channel (132 of Fig. 2A, 64 of Fig. 3; page 8, lines 24-28; page 11, lines 8-11); the means for initiating selectively terminating (136, 138, 142, 144, 146 of Fig. 2B; 66 of Fig. 3; page 11, lines 5-8; page 11, line 18 to page 12, line 9) the instance prior to completing the sequence of messaging operations based on detecting, at a prescribed location in the prescribed sequence (136 of Fig. 2B), the prescribed variable set during execution of the instance and that specifies the prescribed sequence of message operations are not to be performed based on the prescribed variable having been set to specify that the incoming message corresponds to a second message type incompatible with the first type ("Fax Detect=True" in 134 of Fig. 2A), the means for initiating terminating execution of the operations subsequent to the prescribed location (146 of Fig. 2B) and removing the first data from the first data structure (142 of Fig. 2B), based on the prescribed variable set.

Independent claim 45 specifies an application server comprising an interface (40 of Fig. 1; page 7, lines 26-28) configured for receiving (122, 124 of Fig. 2A; 50 of Fig. 3; page 9, lines 15-17) messages from a gateway (12 of Fig. 1) configured for receiving incoming Voice over

IP calls (page 7, lines 13-17), the gateway configured for outputting a first request (50 of Fig. 3, page 9, lines 13-16) for initiating a messaging session according to a first message type in response to receiving an incoming Voice over IP call, the gateway also configured for outputting a reject message in response to detecting that the incoming Voice over IP call corresponds to a second message type incompatible with the first message type (132 of Fig. 2A, 64 of Fig. 3; page 8, lines 13-17 and 23-28; page 11, lines 8-11); and an application runtime environment (18 of Fig. 1) configured for initiating an instance of an application process, configured for executing a prescribed sequence of messaging operations for the first type of incoming message (124, 126, 128, 130 of Fig. 2A; 52, 54, 56b, 58a, 60b of Fig. 3; page 9, line 17 to page 11, line 1), in response to reception of the first request, the instance writing first data into a first data structure that identifies information based on execution of the instance (126, 130 of Fig. 2A; page 9, line 24 to page 10, line 5; page 10, line 26 to page 11, line 1), the application runtime environment including an asynchronous event manager (30 of Fig. 1) configured for selectively causing (134 of Fig. 2A; page 8, lines 23-28; page 11, line 18 to page 12, line 1) termination of the instance prior to completing the sequence of messaging operations (136, 138, 142, 144, 146 of Fig. 2B; 66 of Fig. 3; page 11, lines 5-8; page 11, line 18 to page 12, line 9) based on detecting the reject message, by a prescribed location in the prescribed sequence (136 of Fig. 2B), specifies that the incoming message corresponds to the second message type ("Fax Detect=True" in 134 of Fig. 2A), the asynchronous event manager causing termination of execution of the operations subsequent to the prescribed location (146 of Fig. 2B) and removal of the first data from the first data structure (142 of Fig. 2B).

Dependent claim 49 depends from claim 16, wherein the gateway is configured for sending the first and second requests concurrently for the respective messaging sessions to be executed concurrently (122 of Fig. 2A; page 8, lines 9-14; page 9, lines 13-15; page 12, lines 10-13).

Dependent claim 50 depends from claim 1, wherein the selectively setting includes receiving the reject message by a persistent asynchronous event manager process (30 of Fig. 1) executed by the application server; and setting the prescribed variable by the persistent

asynchronous event manager process, in response to the reject message, prior to the prescribed location in the prescribed sequence (page 8, lines 21-28; page 11, lines 13-25).

Claim 51 depends from claim 11, further comprising detecting the reject message by a persistent asynchronous event manager process (30 of Fig. 1) executed by the application server; and setting a prescribed variable by the persistent asynchronous event manager process and that indicates the prescribed sequence of messaging operations should not be completed, in response to the detection of the reject message and prior to a prescribed location in the prescribed sequence (page 8, lines 21-28; page 11, lines 13-25); the terminating including detecting, by the instance at the prescribed location in the prescribed sequence, the prescribed variable set to indicate the prescribed sequence of messaging operations should not be completed, and in response removing the first data from the first data structure and terminating the operations of the prescribed sequence subsequent to the prescribed location (134 of Fig. 2A; 136, 138, 142, 144, 146 of Fig. 2B; 66 of Fig. 3; page 11, lines 5-8; page 11, line 18 to page 12, line 9).

Claim 52 depends from claim 16, wherein the asynchronous event manager is a persistent application instance executed by the application server (30 of Fig. 1; page 8, lines 21-28; page 11, lines 13-25) .

Independent claim 53 specifies a communications system comprising gateway means (12 of Fig. 1; page 7, lines 13-17) for receiving (120 of Fig. 2A; page 8, lines 9-11; page 9, lines 12-13) an incoming Voice over IP call and in response sending first (50 of Fig. 3) and second requests for initiation of concurrent messaging sessions according to respective first and second message types (122 of Fig. 2A; page 8, lines 9-14; page 9, lines 13-17; page 12, lines 10-16), the gateway means configured for generating a reject message (64 of Fig. 3; page 11, lines 5-12) in response to detecting that the incoming Voice over IP call corresponds to the second message type incompatible with the first message type (132 of Fig. 2A; 64 of Fig. 3; page 6, lines 23-27; page 8, lines 13-17; page 11, lines 5-12); application server means (18 of Fig. 1; page 7, lines 17-21) for initiating (126 of Fig. 2A; page 9, lines 17-22), in response to the first request (50 of Fig. 3), an instance of an application process configured for executing a prescribed sequence of messaging operations for generation of the messaging session according to the first message type

(124, 126, 128, 130 of Fig. 2A; 52, 54, 56b, 58a, 60b of Fig. 3; page 9, line 17 to page 11, line 1), the application server means configured for writing first data into a first data structure that identifies information based on execution of the instance (126, 130 of Fig. 2A; page 9, line 24 to page 10, line 5; page 10, line 26 to page 11, line 1), the application server means having an asynchronous event monitoring means (30 of Fig. 1) configured for causing termination of the instance, including removal of the first data from the data structure, prior to completion of executing the prescribed sequence of messaging operations, in response to reception of the reject message (134 of Fig. 2A; 136, 138, 142, 144, 146 of Fig. 2B; 66 of Fig. 3; page 11, lines 5-8; page 11, line 18 to page 12, line 9).

6. Grounds of Rejection to be Reviewed on Appeal:

A. Whether claims 1-3, 5-22, 24-29, 35-37, 39-41, and 43-53 are unpatentable under 35 USC §103 in view of U.S. Patent No. 5,544,234 to Terajima et al. and U.S. Patent Publication 2003/0095542 A1 by Chang.

7. Arguments:

A. **Claims 1-3, 5-22, 24-29, 35-37, 39-41, and 43-53 are not rendered obvious under 35 U.S.C. §103 in view of Terajima et al. and Chang**

The Examiner finally rejected claims 1-3, 5-22, 24-29, 35-37, 39-41, and 43-53 under 35 USC §103 in view of U.S. Patent No. 5,544,234 to Terajima et al. and U.S. Patent Publication 2003/0095542 A1 by Chang. As described below, the final rejection fails to establish a prima facie case of unpatentability because it fails to demonstrate that “there was an apparent reason to combine the known elements *in the fashion claimed* by the [claims] at issue [where] this *analysis should be made explicit*.” *KSR Int’l v. Teleflex, Inc.* No. 04-1350, 550 U.S. ___, Slip. op. at 14, 82 USPQ2d 1385, 1396 (U.S. Apr. 30, 2007). To the contrary, the final rejection relies on disregard of explicit claim language, unreasonable interpretation of the claim language, and

piecemeal interpretation of the applied references that demonstrate an improper hindsight bias reliant upon ex post facto reasoning.¹

The Independent Claims

Each of the independent claims 1, 11, 16, 20, 35, 45, and 53 specify that a gateway (12 of Fig. 1) receives an incoming Voice over IP call and sends an initiation request to the application server (18 of Fig. 1), and that the application server initiates an instance of an application process configured for executing a prescribed sequence of messaging operations for a first type of incoming message (or for a messaging session), in response to reception of the initiation request. The instance writes first data into a data structure based on execution of the instance.

Each of the independent claims also specify that the application server receives from the gateway a reject *message*: the reject message indicates to the application server that the incoming message (or the Voice over IP call that initiated the messaging session) corresponds to a *second* message type that is incompatible with the first message type. Hence, each of the independent claims specify that the application server terminates the instance, prior to completing the sequence of messaging operations based on the incoming message corresponding to a second message type incompatible with the first type.

Consequently, the independent claims enable a Voice over IP based messaging system (for use for multiple subscribers) to be optimized based on initiating messaging operations more quickly, without the delay typically encountered while waiting for a gateway to determine whether an incoming call is a voice call, fax call, etc. (see page 2, line 22 to page 5, line 3 of the specification), because an application instance can be started for processing a message according to a corresponding message type *even before* a gateway has determined the message type for the incoming call: if the application instance does not match the message type for the incoming call, the instance is terminated due to the determined incompatibility with the incoming message or

¹“A factfinder should be aware, of course, of the distortion caused by hindsight bias and must be cautious of arguments reliant upon ex post reasoning.” *KSR Int’l v. Teleflex, Inc.* No. 04-1350, Slip. op. at 17, 82 USPQ2d 1385, 1397 (U.S. Apr. 30, 2007) (citations omitted).

Voice over IP call. As described in further detail below, each of the independent claims specify “more than the predictable use of prior art elements according to their established functions”², because the independent claims specify that *the gateway receives an incoming Voice over IP call* and sends an initiation request *to* the application server, and that the application server receives from the gateway a reject *message* that is used by the application server to terminate the instance of the messaging session and remove the first data from the first data structure.

In addition, as described below with respect to claims 12, 16, 49, and 53, the gateway can initiate *multiple concurrent messaging sessions* for respective message types, where the nonrelevant messaging sessions are terminated based on identifying the message type for the incoming call. Hence, call processing performance between the Voice over IP gateway and the application server is optimized, with no loss of data in the application server.

A1. No Suggestion in the Hypothetical Combination of Claimed Reception of Messages between Application Server and Gateway Based on a Received Voice over IP Call

Each of the independent claims 1, 11, 16, 20, 35, 45, and 53 specify that the gateway receives an incoming Voice over IP call and sends an initiation request to the application server, and that the application server receives from the gateway a reject *message*. As demonstrated below, the hypothetical combination of Terajima et al. and Chang fail to disclose or suggest this feature.

Terajima et al.

Terajima et al. describes a facsimile machine (e.g., Figs. 1, 7, 15, 18, 28) that includes an automatic answering telephone 16 configured for automatically answering an incoming call in response to detection of the call: as illustrated in Figs. 1, 7, 15, and 18 a Network Control Unit (NCU) 107 (107a, 308) is configured for switching a call connection (using a relay 1 in the NCU

²*Id.*

107) *from* the answering telephone 16 *to* the facsimile apparatus in response to detection of the facsimile tones. In particular, the NCU 107 includes a CNG detector 7 configured for detecting a CNG signal indicating a fax call (see, e.g., Figs. 2, 4, 6, 8; col. 1, lines 38-48 and 57-63, col. 5, line 60 to col. 6, line 16; col. 6, lines 17-41; col. 7, lines 61-65 and col. 8, lines 10-15).

Alternately, the modem 106 coupled to the NCU 107 can be configured for detecting the CNG signal (Fig. 5, col. 7, lines 23-31). The CNG signal causes the NCU 107 to **switch** the relay *from* the answering telephone 16 *to* the facsimile apparatus (col. 1, lines 38-48 and 57-63, col. 5, line 60 to col. 6, line 16; col. 6, lines 17-41; col. 7, lines 61-65 and col. 8, lines 10-15). Fig. 28 illustrates a **changeover** circuit 502 that selectively switches over *from* the 1100 Hz removing circuit 504 (connecting the answering telephone 311) *to* the NCU 107 (connecting the facsimile modem 106) in response to the CNG circuit 313 detecting the CNG signal (cols. 19-20).

Further, Terajima et al. also describes that the answering telephone 16 in Fig. 10 includes its own tone detecting circuit 206 configured for detecting a fax signal such as a CNG signal (col. 9, lines 1-3). Fig. 11 is a diagram illustrating operation by the **answering machine 16** of Fig. 10, where the control program stored in the ROM 222 of the **answering machine 16**, in response to **detection of the CNG signal by the tone detecting circuit 206** in step S26, opens **its own relay 201b** (to release the seized telephone line N) in step S29, and erases the recorded message in step S30 (col. 9, lines 60-65).

Hence, Terajima et al. *consistently* describes that the call connection is **switched** by NCU 107 (107A, 308), or the changeover circuit 502 of Fig. 28, **from** the answering telephone **to** the facsimile modem circuitry. Terajima et al. consistently describes that the relay 1 in the NCU 107 **switches** the call in response to the fax tone detection by the CNG detector 7 in the NCU 107 (see, e.g., Figs. 2, 4, 6, 8) or in the modem 106 coupled to the NCU 107 (e.g., Fig. 5, col. 7, lines 23-31).

Further, Terajima et al. describes that the answering machine 16 independently detects the fax tones, and deletes the stored message in response to the detected fax tones.

As admitted on page 4 in the Final Action, Terajima et al. does not disclose nor suggest recording data from an **incoming Voice over IP call in an application server**, where the

incoming call is received via a gateway configured for receiving *Voice over IP calls*. Rather, the rejection admits on page 5 that “Terajima discloses the above processes are performed based upon receiving requests *directly at the telephone* rather than through a packet network gateway ..., as *Terajima only explicitly discloses initiation and rejection of call over conventional POTS network*.” Hence, the final rejection concedes that Terajima et al. describes a consumer device, namely a facsimile machine (Fig. 1) that has an automatic answering telephone 16 configured for automatically answering an incoming call in response to detection of the call.

Moreover, the rejection demonstrates an unreasonably broad interpretation of the claimed “application server”, because the interpretation (encompassing the consumer *answering machine 16* of Terajima) is inconsistent with the specification, which describes the application server as a unified messaging *system* that receives Voice over IP calls from the gateway.

Since Terajima does not disclose or suggest recording data from an incoming Voice over IP call in an application server (via a gateway), but rather a consumer device, the Examiner has the burden of demonstrating that “there was an apparent reason to combine the known elements *in the fashion claimed*.” *KSR Int’l v. Teleflex, Inc.* No. 04-1350, Slip. op. at 14, 82 USPQ2d 1385, 1396. The Examiner has failed to establish the analysis as required by the Supreme Court. Rather, the hypothetical combination teaches no more than “the predictable use of prior art elements according to their established functions,” *Id.*, with no disclosure or suggestion of the claimed features as a whole.

Chang

The rejection relies on Chang on page 5 of the Final Action to state that “an IP telephony module 59 of gateway device 26 [is] capable of *receiving* both voice and fax calls over the internet using IP protocol (claims 1, 11, 12, 16, 20, 35, 45, 53 - receiving incoming VoIP calls *including initiation and reject messages through a gateway*).”

The Final Action also states on page 10 that “Chang explicitly discloses the communication of voice and fax call *between parties at two different locations over an IP network*”; further, the rejection concedes that para. 227 of Chang et al. does not “explicitly

specify anything about recording or not recording the message.” Moreover, the rejection admits on page 10 that “Chang is *not* relied upon for the disclosure of ... initiation and reject messages”.

Further, Chang et al. describes that the destination called party can receive the call *either* via the IP network *or* via the public switched telephone network:

[0016] As used herein, a voice telephone call from a caller telephone to a **called telephone**, the call carried via an IP network, is referred to as a VoIP call. As used herein, a fax call from a caller fax machine to a **called fax machine**, the call carried via an IP network, is referred to as an FoIP call.

[0017] Accordingly, it is an object of the invention to provide an integrated voice gateway system for use within a company which can route a voice telephone call between parties at two different locations over an IP network **as well as the PST NETWORK** and to automatically select **which of the IP network and PST NETWORK over which to route the calls**. It is a further object of the invention to provide a system which can route a voice telephone call between a calling party using a telephone at a first location within the system to a second location within the system via an IP network, **and then from the second location to a called party at a third location via the PST NETWORK**.

Fig. 1 of Chang et al. describes that the customer devices (e.g., telephone), are not part of the gateway server 26 that sends and receives *Voice over IP* calls, but rather are connected to conventional POTS or ISDN telephone connections via a PBX or a Central Office Switch:

[0080] The PBX 34 [of Fig. 2] is coupled to CO1 12. One or more telephones 38 are coupled to the PBX 34. The telephones 38 may be any telephone device connecting to a PBX, e.g. analog (POTS), proprietary digital, or standards-based digital (ISDN BRI). Each telephone 38 may be logically associated with and may be co-located with a respective workstation 24. The gateway server 26 is also coupled to the PBX 34 via an industry standard telephone station interface 33.

Moreover, Chang et al. consistently and repeatedly describes the called party telephone (e.g., 138 or 238) receives the incoming call not from a Voice over IP gateway, but rather from either a Central Office Switch in the Public Switched Telephone Network (PSTN) 16, or a conventional called PBX 134:

CO1 12 routes the telephone call through the PST NETWORK 16 to CO2 14. **CO2 14**

delivers the call to the called PBX 134 via an **available trunk** and may transmit a subset of the called telephone number. The called telephone 138 rings and is answered by the called party (not illustrated).

(Para. 165, lines 14-18)

Chang et al. also consistently illustrates in Figs. 2, 4, 5-7, 11-14, 16-46, 50-51, 54-55, and 58 that the called telephone device receives the call via either the Central Office (CO) Switch in the PSTN, or the PBX 134. Moreover, Chang et al. consistently discloses (see, e.g., Figs. 5-14, 16, 19 *et seq*) that the call from the called gateway server 126 to the called PBX 134 is supplied by either a T1 driver driving a telephone trunk line (e.g., T1) (see, e.g., para. 108) or an analog driver 174 that places the call to the destination PBX 134 or CO (see e.g., para. 174, 176).

The Hypothetical Combination

Consequently, if Chang is not relied upon for the disclosure of initiation and reject messages, but for the teaching that Terajima can handle fax and voice calls “communicated *over* packet networks as well as POTS networks,” the hypothetical combination discloses no more than a consumer facsimile device (as disclosed in Terajima) that receives the incoming call via the same conventional telephone line N (see Terajima at Figs. 1 and 2 and col. 5, lines 45-46), where the incoming call that has been routed by an IP network is converted back into a conventional POTS call by a called gateway server.

In particular, the Final Rejection states on page 5 that “[i]t would have been obvious to one of ordinary skill in the art ... to apply the method, apparatus and software processes of Terajima to voice and fax calls received at a gateway from packet networks such as the Internet, as shown by Chang. Such a modification would enable Terajima to be applied to voice/fax calls ***communicated over packet networks*** as well as conventional POTS networks.”

This rejection is legally deficient because it only provides an argument why one skilled in the art would have combined the teachings of Terajima and Chang et al. *generally* (i.e., according to their predictable use). One having ordinary skill in the art, having reviewed both Terajima and Chang, would conclude no more than the predictable result that the *destination* facsimile

apparatus of Terajima can be coupled *either* to a destination central office switch *or* a called PBX, and that the incoming call is received by the destination central office switch *or* a called PBX via a conventional telephone line: Chang teaches no more than that the incoming call is supplied to the destination central office switch *or* the called PBX by a **called gateway server 126** that received the call via *either* the IP network *or* the PSTN 16.

Consequently, the hypothetical combination of Terajima and Chang teaches no more than the predictable use of coupling the destination a destination central office (CO) (or destination PBX), where the destination CO/PBX receives the incoming call from a **called gateway server** having received the call from either the IP network *or* the PSTN 16.

As apparent from the foregoing, the rejection fails to provide any analysis of any “apparent reason” that one of ordinary skill in the art would have provided any improvements *beyond* (i.e., more than) the predictable use of Terajima et al. and Chang. et al. according to their established functions.³

As apparent from the foregoing, the fact that the calls are routed as Voice over IP calls in the hypothetical combination is not relevant to the *destination* facsimile apparatus of Terajima, because the *destination* facsimile apparatus of Terajima still would receive the call via an analog telephone line N.

Each of the independent claims, however, specify “more than the predictable use of prior art elements according to their established functions”⁴, because all the independent claims specify that *the gateway receives an incoming Voice over IP call* and sends an initiation request to the application server, and that *the application server* receives from the gateway a reject *message*. The rejection concedes with respect to para. 227 of Chang et al. that does not “explicitly specify anything about recording or not recording the message” and that “Chang is *not* relied upon for the disclosure of initiation and reject messages”.

Hence, even though the claims are entitled to their broadest reasonable interpretation, this

³ See *KSR Int’l v. Teleflex, Inc.* No. 04-1350, Slip. op. at 13-14, 82 USPQ2d 1385, 1396.

⁴*Id.*

broadest reasonable interpretation is insufficient to establish that the hypothetical combination discloses a “gateway” that receives the *Voice over IP call* and that sends a “reject *message*” to the application server. In fact, there is no disclosure of any “message” sent by the “gateway” to the “application server” *especially* since Terajima discloses an electrical signal to identify the presence of fax tones (see, e.g., the signal output by the tone detecting circuit 206 in Fig 10; col. 9, lines 1-3 and 48-50): in response to the electrical signal indicating the presence of fax tones, the relay 201b in the answering machine 16 is **opened** in step S29 to release the line N (col. 9, lines 60-63). A signal, however, and the opening of a relay, is not a teaching of a “reject *message*” that is sent from a gateway to an application server, given the broadest *reasonable interpretation*.⁵

In particular, the specification describes with respect to Figures 1, 2A, and 3, that the reject message is output, by the gateway 12 to the server interface 40, onto the H.225 call control channel 20 according to H.225 protocol, for example a Release Complete Message specifying a Cause Information Element having a value of “25” (IE = 25) (see, e.g., page 8, lines 13-16 and 24-26; page 11, lines 8-11). Hence, the broadest reasonable interpretation of “reject message” cannot be so broad as to extend beyond an IP-based message containing data; as apparent from the foregoing, the “reject message” cannot be so broadly construed as to encompass a single electrical signal.

Moreover, both the specification and Chang et al. demonstrate that the broadest reasonable interpretation of “gateway” should not be so broad as to encompass the Network Control Unit (107) of Figs. 1 and 2 in Terajima the receive the PSTN signal Line N.⁶ Rather, the

⁵The specification describes the reject message as an H.225 Release Complete Message (see, e.g., page 8, lines 15 and 24-28; page 11, lines 10-11).

⁶“During patent examination, the pending claims must be ‘given their broadest reasonable interpretation consistent with the specification.’” MPEP §2111 at 2100-46 (Rev. 3, Aug. 2005) (*quoting In re Hyatt*, 211 F.3d 1367, 1372, 54 USPQ2d 1664, 1667 (Fed. Cir. 2000)).

“The broadest reasonable interpretation of the claims must also be consistent with the interpretation that those skilled in the art would reach.” MPEP §2111.01 at 2100-47 (Rev. 3,

specification and claims explicitly specify that the claimed “gateway” receives Voice over IP calls, and Chang et al. consistently describes the “gateway network” as interfacing between Voice over IP calls via the IP network 18, and the public switched telephone network 16 via a PBX 34. Hence, any assertions in the rejection that Terajima discloses a “gateway” as claimed is inconsistent with the specification, inconsistent with the interpretation applied in Chang et al., and therefore unreasonable.

For these and other reasons, the §103 rejection of independent claims 1, 11, 16, 20, 35, 45, and 53 should be reversed.

A2. No Suggestion of Application Server Receiving Initiation Request or Reject Message via a Voice over IP Call Control Channel, as in Claims 1, 20, and 35

Independent claims 1, 20, and 35 each specify that the application server receives “an initiation request from a gateway configured for receiving incoming Voice over IP calls, including receiving the initiation request via a Voice over IP call control channel between the application server and the gateway”. Independent claims 1, 20, and 35 also specify “receiving a reject message from the gateway via the Voice over IP call control channel”.

As illustrated in Figures 1 and 3, the gateway 12 and the application server 18 are directly connected via call control channel 20, a media control channel 22, and RTP media streams 24a and 24b. Hence, the broadest reasonable interpretation requires that the application server receives the initiation request and/or reject message from a connected Voice over IP call control channel.

According to the Advisory Action, “[i]t is **admitted** that **neither** Terajima **nor** Chang explicitly disclose ‘receiving incoming VoIP calls, including receiving the initiation request via a VoIP call control channel between the application server and the gateway’.” Hence, since the Advisory Action admits that neither Terajima nor Chang disclose receiving the initiation request

Aug. 2005) (*citing In re Cortright*, 165 F.3d 1353, 1359, 49 USPQ2d 1464, 1468 (Fed. Cir. 1999)).

via the VoIP call control channel, the burden is on the Examiner to demonstrate one having ordinary skill in the art would have combined the hypothetical combination *in the manner claimed* in order to include this limitation.

Further, the motivation described in the Final Rejection and the Advisory Action relies on “the combination of references” to meet the claimed limitations, with no analysis or reasoning whatsoever to support the argument that the “combination of references” supports an obviousness conclusion. As described on pages 14-16 *supra*, the final rejection (and the Advisory Action) only provide motivation for combining Terajima et al. and Chang generally, i.e., according to their predictable use, where the facsimile apparatus of Terajima is coupled to a destination central office (CO) (or destination PBX), where the destination CO/PBX receives the call from the destination gateway server of Chang having received the call from either the PSTN or the IP network. This hypothetical combination satisfies the motivation specified in the Final Rejection and the Advisory Action of enabling Terajima to “operate on voice and/or fax calls received through the Internet.”

The fact that the calls are routed over the Internet in the hypothetical combination is insufficient, however, to establish that it would have been obvious to supply the initiation (and reject) messages by the gateway to the *application server via the Voice over IP call control channel*, as claimed. Hence, the rejection fails to articulate any reasoning or rational basis to support the contention that the hypothetical combination renders obvious the claimed feature of supplying the initiation (and reject) messages by the gateway to the application server via the *Voice over IP call control channel*, as required by the Federal Circuit and the Supreme Court.⁷ Hence, “a patent composed of several elements is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art.” *KSR Int’l v. Teleflex, Inc.*,

⁷ “[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.” *KSR Int’l v. Teleflex, Inc.* No. 04-1350, Slip. op. at 14, 82 USPQ2d 1385, 1396 (U.S. Apr. 30, 2007) (*quoting In re Kahn*, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006))

No. 04-1350, 550 U.S. ____, Slip op. at 13, 82 USPQ 2d 1385, 1396 (U.S. Apr. 30, 2007).

Hence, the rejection fails to provide any analysis of any “apparent reason” that one of ordinary skill in the art would have provided any improvements *beyond* (i.e., more than) the predictable use of Terajima et al. and Chang. et al. according to their established functions.⁸

Moreover, the disclosed electrical signal used by Terajima to detect fax tones (let alone the hypothetical combination) fail to disclose or suggest the claimed reject message received *by the application server* and *from the gateway* via the *Voice over IP call control channel*, as specified in independent claims 1, 20, and 35. In fact, the rejection fails to address these claimed features.

The Advisory Action demonstrates an impermissible hindsight bias by improperly equating the electrical signal used by Terajima as “signaling ‘messages’ *when applied to the VoIP environment of Chang.*” The Final Action and Advisory Action, however, fail to establish how such an electrical signal (as used by Terajima) *could* or *would* be applied to the “VoIP environment of Chang.” To the contrary, the hypothetical combination teaches away from implementing the facsimile device of Terajima within the VoIP environment of Chang, because Chang is concerned with using the gateway server between endpoint devices (such as the Terajima facsimile device) *and* between source/destination Cos/PBXs. The Supreme Court has recognized that “when the prior art teaches away from combining certain known elements, discovery of a successful means of combining them is more likely to be nonobvious.” *KSR Int’l v. Teleflex, Inc.*, Slip. op. at 12, 82 USPQ2d at 1395.

Consequently, the rejection fails to establish a *prima facie* case that the hypothetical combination discloses or suggests the claimed *application server* “receiving a reject message from the gateway via the Voice over IP *call control channel*”. For this reason alone the §103 rejection of claims 1, 20, and 35 must be withdrawn.⁹

⁸ See *KSR Int’l v. Teleflex, Inc.* No. 04-1350, Slip. op. at 13-14, 82 USPQ2d 1385, 1396.

⁹It is well settled that each and every claim limitation must be taught or suggested. As specified in MPEP §2143.03, entitled “**All Claim Limitations Must Be Taught or Suggested**”:

A3. No Suggestion of Application Server Receiving Data via Voice over IP Media Channel, as in Claims 1, 20, and 35

The rejection also fails to address the claimed *application server* “writing first data having been *received from the gateway via a Voice over IP media channel*”, as specified in claims 1, 20, and 35. As illustrated in Figures 1 and 3, the gateway 12 and the application server 18 are directly connected via RTP media streams 24a and 24b. Hence, the broadest reasonable interpretation requires that the application server receives the first data from a connected Voice over IP media channel.

As described above, the hypothetical combination provides no disclosure or suggestion that the facsimile apparatus of Terajima receives a Voice over IP media channel; to the contrary, the facsimile apparatus of Terajima simply receives the incoming POTS call on its POTS line N after the call on the POTS line N has been translated by the called gateway server of Chang et al.

Further, the Final Rejection and the Advisory Action fail to address this specific claimed feature.¹⁰ For this reason alone the §103 rejection of claims 1, 20, and 35 must be withdrawn, because the rejection fails to address this claimed feature, and because the Final Rejection fails to demonstrate that the hypothetical combination renders this feature obvious when considered in the entirety of claims 1, 20, and 35.

A4. No Suggestion of the Gateway Outputting a Reject Message to the Application Server In Response to *Detecting* the Incompatible Message Types, as in Claims 11, 16, 45, and 53

Independent claims 11, 16, 45, and 53 each specify that the gateway, configured for

“To establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). ‘All words in a claim must be considered in judging the patentability of that claim against the prior art.’ *In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970).” MPEP §2143.03 at 2100-139 (Rev. 3, Aug. 2005).

¹⁰See footnote 9 *supra*.

receiving incoming Voice over IP calls, is configured for outputting a reject message in response to detecting that the incoming Voice over IP call corresponds to a second message type incompatible with the first message type. Hence, the gateway actually *detects* the incompatibility, and in response outputs the reject message to the application server. As illustrated in Figures 1, 2A, and 3, the reject message is output, by the gateway 12 to the server interface 40, onto the H.225 call control channel 20 according to H.225 protocol, for example a Release Complete Message specifying a Cause Information Element having a value of "25" (IE = 25) (see, e.g., page 8, lines 13-16 and 24-26; page 11, lines 8-11). Hence, the broadest reasonable interpretation of "reject message" cannot be so broad as to extend beyond an IP-based message containing data; as apparent from the foregoing, the "reject message" cannot be so broadly construed as to encompass a single electrical signal.

The Advisory Action states that "the electrical signals in Terajima carry information for the purposes of identifying a particular state of a call"; while such electrical signals are sufficient to identify a state of a call within a single consumer device, a single electrical signal is not a teaching of outputting information from one distinct device (a gateway) to another distinct device (an application server) via an IP based connection, as disclosed.

As described above, the assertion that the claimed gateway can be interpreted to encompass the NCU switch of Terajima is inconsistent with the specification; further, such an interpretation is inconsistent with the teachings of Chang et al., which illustrate in Fig.3 the gateway server as a complex system of interconnected databases, as opposed to a single component of a consumer apparatus. Hence, such an interpretation that the claimed gateway can be interpreted to encompass the NCU switch of Terajima is unreasonable.

Further, the hypothetical combination described above discloses no more than "the predictable use of prior art elements according to their established functions," namely the called gateway server 126 converting an incoming VoIP or FoIP call into a conventional POTS call supplied to a called PBX 134 or a central office switch in the PSTN, for delivery to the facsimile apparatus of Terajima via its POTS line N. Since the rejection fails to demonstrate an apparent reason for one of ordinary skill in the art to have provided the gateway server 126 from Chang et

al. with the ability to detect any incompatibility, the hypothetical combination fails to disclose or suggest that the claimed gateway detects the incompatibility and *in response* outputs the claimed reject message.

For these and other reasons, the rejection of claims 11, 16, 45, and 53 should be reversed.

A5. No Disclosure or Suggestion of Concurrent Messaging Sessions as in Claims 12, 16, 49, and 53

Contrary to the assertions in the rejection, the hypothetical combination of Terajima and Chang neither discloses nor suggests the claimed feature in claims 12, 16, 49, and 53 of the gateway outputting first and second requests for *concurrent* messaging sessions.

Terajima consistently and unequivocally teaches that the Network Control Unit (NCU) 107 is configured for **switching** a call connection (using a relay 1 in the NCU 107) from the answering telephone 16 to the facsimile apparatus in response to detection of the facsimile tones. **Each and every embodiment** in Terajima teaches switching the relay **from** the answering telephone 16 **to** the facsimile apparatus.

In fact, the claims of Terajima require that one of the answering phone or fax machine be disconnected at any time, or that the step of “changing over the switch” be performed (see, e.g., claims 1, 9, 16, 21, 24, 30).

Hence, Terajima et al. *consistently* describes that the call connection is **switched** by the relay 1 in the NCU 107 in response to the fax tone detection by the CNG detector 7 in the NCU 107 (see, e.g., Figs. 2, 4, 6, 8) or in the modem 106 coupled to the NCU 107 (e.g., Fig. 5, col. 7, lines 23-31). Therefore, any attempt to modify Terajima to eliminate the switch as described (**and claimed**) by Terajima would be improper.

The Advisory Action presents inconsistent positions, because the Advisory Action states that “[t]he Examiner has not proposed to eliminate the NCU of Terajima.” In that case, the hypothetical combination **must switch** from the answering phone to the fax machine, thereby teaching away from the claimed concurrent messaging sessions by **precluding** such concurrent

sessions.

Hence, the Advisory Action concedes that the proposed removal of the switch would change the principle of operation of the prior art invention being modified; consequently, the teachings of the references are not sufficient to render the claims prima facie obvious. MPEP § 2143.01, page 2100-132 (Rev. 2, May 2004) (*citing In re Ratti*, 123 USPQ 349 (CCPA 1959)).¹¹

Further, any attempt to remove the switch in Terajima (in order to provide concurrent messaging sessions, as claimed) would destroy the invention of Terajima and would therefore be improper. See *Ex parte Hartmann*, 186 U.S.P.Q. 366, 367 (P.T.O.B.O.A. 1974) (reversing rejection when modification would destroy basis for invention in one or two references). Therefore, the rejection should be reversed.

Moreover, the Final Action and the Advisory Action illustrates a gross mischaracterization of Terajima, and demonstrate an unwillingness to consider the teachings of Terajima in their entirety.¹²

Specifically, the rejection at page 4 of the Final Action and the Advisory Action continually rely on Figure 11 as a teaching of “concurrent messaging”, and disregards Appellants repeated arguments that ***Figure 11 does not disclose any concurrent operations***.

¹¹The Examiner is reminded that the proposed modification cannot change the principle operation of a reference or render it unsatisfactory for its intended purpose. “If the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims prima facie obvious.” MPEP § 2143.01, Rev. 5, Aug. 2006 at p. 2100-130 (*Citing In re Ratti*, 270 F.2d 810, 123 USPQ 349 (CCPA 1959). “If the proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification.” *Id.* at 2100-129 (*Citing In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984)). *Cf.* MPEP §2145.III at page 2100-159 (Rev. 5, Aug. 2006) (“the claimed combination cannot change the principle of operation of the primary reference or render the reference inoperable for its intended purpose.”).

¹²“A prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention. MPEP §2141.02, page 2100-124 (Rev. 5, Aug. 2006) (*citing W.L. Gore & Assoc. v. Garlock, Inc.*, 220 USPQ 303 (Fed. Cir. 1983), *cert. denied*, 469 U.S. 851 (1984))(emphasis in original).

Rather, Fig. 11 describes the operation of the operation within the answering machine 16 of Fig. 10 (col. 4, lines 21-23; col. 9, lines 23-27) and does not provide a description of the disclosed NCU 107 or the disclosed facsimile machine (106 and 101 of Fig. 1). As described above, step S22 in Fig. 11 closes the contact 201b of Fig. 10 in the answering machine 16 to supply the signal from the NCU 107; the NCU 107, however, has its own relay 1 to **switch over between** facsimile operation and telephone answering machine operation (see, e.g., relay 1 in Figs. 2, 4, 5, 6, 8).

As described *supra* on page 12, Terajima et al. describes that the answering telephone 16 in Fig. 10 includes its own tone detecting circuit 206 configured for detecting a fax signal such as a CNG signal (col. 9, lines 1-3) and distinct from the NCU 107. Fig. 11 is a diagram illustrating operation by the answering machine 16 of Fig. 10, where the control program stored in the ROM 222 of the answering machine 16, in response to **detection of the CNG signal by the tone detecting circuit 206** in step S26, opens **its own relay 201b** (to release the seized telephone line N) in step S29, and erases the recorded message in step S30 (col. 9, lines 60-65).

Hence, Terajima et al. *consistently* describes that the call connection is **switched** by NCU 107 (107A, 308), or the changeover circuit 502 of Fig. 28, **from** the answering telephone **to** the facsimile modem circuitry.

Hence, step S26 (identified in the Advisory Action) does not disclose concurrent messaging sessions, as claimed, but rather a detection of the CNG signal within the answering machine that is **distinct** from the CNG detection within the NCU 107.

For these and other reasons, the §103 rejection of claims 12, 16, 49, and 53 is legally deficient and must be reversed.

A6. No Disclosure or Suggestion of Application Server Including Asynchronous Event Manager

Claims 16, 45, 50-52 each specify an *asynchronous* event manager *within the application server* (or application runtime environment) and that is configured for: detecting the

reject message, causing termination of the instance of the application process, and removing the first data from the data structure.

As described in the specification:

In particular, the application server 18 includes an asynchronous event manager 30 that is implemented as a persistent process executed within the application runtime environment of the application server 18. The asynchronous event manager 30 is configured for monitoring the presence of reject messages from the gateway 12. The asynchronous event manager 30, upon detecting an H.225 reject message that specifies a “Release Complete” having a Cause Information Element having a value of “25” (IE = 25), and updates the corresponding global variables for the identified application session to cause the identified application session to be terminated by the application server 18.

(Page 8, lines 21-28).

Terajima does not disclose the claimed asynchronous event manager within the application server, as claimed. Further, the rejection provides an improper interpretation of Terajima: the rejection on pages 3-4 relies on the CNG detector 7 of Fig. 8, step S26 of Fig. 11, and col. 9, lines 60-65 to assert that “Terajima then discloses that CNG detector 7 (Fig. 8) determines whether the call is a voice call or fax call in step S26 and, if a fax CNG is detected, releases the line, stops processing of writing the received message, and erases the message that had been recorded to that point.”

This interpretation is incorrect: as described above, step S26 is in Fig. 11 and refers to the control program executed in the ROM 222 in the **answering machine 16** to determine whether the CNG signal has been detected by the **tone detecting circuit 206 in the answering machine 16 of Fig. 10** (col. 8, line 45 to col. 9, line 3; col. 9, lines 15-16 and 23-65). Hence, the “CNG detector 7 outputs the CNGDET signal to the **controller 101** [controlling the facsimile machine] upon detecting the CNG signal”, and not the answering machine 16 (col. 6, lines 10-12).

Hence, the CNG detector 7 provides no information whatsoever to the answering machine 16, and is not even a component of the answering machine 16, but rather is a part of the NCU; further, there is no disclosure or suggestion of any detecting of a “reject message” as claimed. As argued above, a “signal” as described in Terajima is not a teaching of the “reject message” output

by the gateway, as claimed.

Further, the tone detecting circuit 206 of Fig. 10 cannot be considered a teaching of the claimed *asynchronous* event manager (illustrated as a *persistent process* that monitors for reject messages), because the tone detecting circuit 206 does not detect any “reject messages”, but simply determines whether a CNG signal is present (col. 9, lines 1-3 and 48-50), so long as the relay circuit 201b in the and the relay circuit 1 in the NCU 107 are closed.

Hence, the hypothetical combination fails to disclose or suggest an *asynchronous* event manager that monitors for the reception of the reject message, as claimed. For these and other reasons, the rejection of claims 16, 45, 50-52 should be reversed.

Conclusion

For the reasons set forth above, it is clear that Appellant’s claims 1-3, 5-22, 24-29, 35-37, and 39-41, and 43-53 are patentable over the references applied. Accordingly the appealed claims 1-3, 5-22, 24-29, 35-37, and 39-41, and 43-53 should be deemed patentable over the applied references. It is respectfully requested that this appeal be granted and that the Examiner’s rejections be reversed.

To the extent necessary, Appellant petitions for an extension of time under 37 C.F.R. 1.136 and 37 C.F.R. 41.37(e). Please charge any shortage in fees due in connection with the filing of this paper, including any missing or insufficient fees under 37 C.F.R. 1.17(a) or 41.20(b)(2), to Deposit Account No. 50-1130, under Order No. 95-472, and please credit any excess fees to such deposit account.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'L. R. Turkevich', with a stylized flourish at the end.

Leon R. Turkevich
Registration No. 34,035

Customer No. 23164
October 2, 2007

8. Claims Appendix

1. (PREVIOUSLY PRESENTED) A method in an application server, the method comprising:

receiving, by the application server, an initiation request from a gateway configured for receiving incoming Voice over IP calls, including receiving the initiation request via a Voice over IP call control channel between the application server and the gateway;

initiating by the application server an instance of an application process configured for executing a prescribed sequence of messaging operations for a first type of incoming message, in response to reception of the initiation request, the initiating including writing first data, having been received from the gateway via a Voice over IP media channel, into a first data structure that identifies information based on execution of the instance;

selectively setting by the application server a prescribed variable based on receiving a reject message from the gateway via the Voice over IP call control channel; and

selectively terminating, by the application server, the instance prior to completing the sequence of messaging operations based on detecting, at a prescribed location in the prescribed sequence, the prescribed variable set during execution of the instance and that specifies the prescribed sequence of message operations are not to be performed based on the prescribed variable having been set to specify that the incoming message corresponds to a second message type incompatible with the first type, the selectively terminating including terminating execution of the operations subsequent to the prescribed location and removing the first data from the first data structure.

2. (PREVIOUSLY PRESENTED) The method of claim 1, wherein the initiating includes executing the prescribed sequence of messaging operations for a voice message as the first type.

3. (PREVIOUSLY PRESENTED) The method of claim 2, wherein the selectively terminating includes terminating the instance based on detecting that the prescribed variable,

specifying a voice over IP protocol message, specifies a call rejected condition.

4. (CANCELED).

5. (PREVIOUSLY PRESENTED) The method of claim 3, wherein the detecting includes identifying the incoming message as a facsimile message as said second message type.

6. (PREVIOUSLY PRESENTED) The method of claim 1, wherein the removing includes deleting a recorded message as the first data from the first data structure.

7. (PREVIOUSLY PRESENTED) The method of claim 6, wherein the selectively terminating further includes adding a log entry indicating deletion of the recorded message prior to storage within a subscriber message store, based on detecting that the prescribed variable specifies a detected difference between the first type and a detected type having been identified as said second message type.

8. (ORIGINAL) The method of claim 7, wherein the first type corresponds to a voice message, the method further comprising setting the prescribed variable to not perform the prescribed sequence of message operations based on detecting that the incoming message is a fax message.

9. (PREVIOUSLY PRESENTED) The method of claim 1, wherein the selectively terminating includes halting operations for transmission of a message, recorded during execution of the instance, into a subscriber message store.

10. (ORIGINAL) The method of claim 1, further comprising selectively completing execution of the messaging operations, including transmission of a message recorded during

execution of the instance, based on an absence of the prescribed variable being set upon the instance reaching the prescribed location in the prescribed sequence.

11. (PREVIOUSLY PRESENTED) A method in a communications system having a gateway configured for receiving incoming calls and an application server, the method comprising:

sending a request by the gateway to the application server for initiating a messaging session according to a first message type in response to receiving an incoming Voice over IP call;

initiating by the application server an instance of an application process configured for executing a prescribed sequence of messaging operations for generation of the messaging session, including writing first data into a first data structure that identifies information based on execution of the instance;

detecting by the gateway, following sending the request, that the incoming Voice over IP call corresponds to a second message type incompatible with the first message type and in response sending a reject message to the application server; and

terminating the instance, prior to completion of executing the prescribed sequence of messaging operations by the application server in response to the reject message, including removing the first data from the first data structure.

12. (PREVIOUSLY PRESENTED) The method of claim 11, wherein the sending includes sending a second request, concurrently with sending the request for initiating the messaging session according to the first message type, for initiation of a messaging session according to the second message type in response to receiving the incoming Voice over IP call.

13. (PREVIOUSLY PRESENTED) The method of claim 12, wherein the sending of the second request includes outputting the second request to a server configured for initiating the messaging session according to the second message type.

14. (PREVIOUSLY PRESENTED) The method of claim 13, wherein the first message type corresponds to a voice message, and the second message type corresponds to a fax message, the sending of a reject message including specifying a voice over IP protocol call rejected message.

15. (PREVIOUSLY PRESENTED) The method of claim 11, wherein the removing includes deleting a recorded message as the first data from the first data structure prior to storage in a subscriber message store.

16. (PREVIOUSLY PRESENTED) A communications system comprising:
a gateway configured for receiving an incoming Voice over IP call and in response sending first and second requests for concurrent initiation of messaging sessions according to respective first and second message types, the gateway configured for generating a reject message in response to detecting that the incoming Voice over IP call corresponds to the second message type incompatible with the first message type; and
an application server configured for initiating, in response to the first request, an instance of an application process configured for executing a prescribed sequence of messaging operations for generation of the messaging session according to the first message type, the application server configured for writing first data into a first data structure that identifies information based on execution of the instance, the application server having an asynchronous event manager configured for causing termination of the instance, including removal of the first data from the data structure, prior to completion of executing the prescribed sequence of messaging operations, in response to reception of the reject message.

17. (ORIGINAL) The system of claim 16, further comprising a second server configured for initiating the messaging session according to the second message type in response to reception of the second request, the second server configured for receiving a fax message as the second message type.

18. (PREVIOUSLY PRESENTED) The system of claim 16, wherein the asynchronous event manager is configured for causing removal of a recorded message as the first data from the data structure, prior to storage in a subscriber message store, in response to reception of the reject message.

19. (ORIGINAL) The system of claim 17, wherein the gateway is configured for generating the reject message to specify a voice over IP protocol message.

20. (PREVIOUSLY PRESENTED) A computer readable medium having stored thereon sequences of instructions for an application server to execute a messaging session, the sequences of instructions including instructions for performing the steps of:

receiving, by the application server, an initiation request from a gateway configured for receiving incoming Voice over IP calls, including receiving the initiation request via a Voice over IP call control channel between the application server and the gateway;

initiating by the application server an instance of an application process configured for executing a prescribed sequence of messaging operations for a first type of incoming message, in response to reception of the initiation request, the initiating step including writing first data, having been received from the gateway via a Voice over IP media channel, into a first data structure that identifies information based on execution of the instance;

selectively setting by the application server a prescribed variable based on receiving a reject message from the gateway via the Voice over IP call control channel; and

selectively terminating, by the application server, the instance prior to completing the sequence of messaging operations based on detecting, at a prescribed location in the prescribed sequence, the prescribed variable set during execution of the instance and that specifies the prescribed sequence of message operations are not to be performed based on the prescribed variable having been set to specify that the incoming message corresponds to a second message type incompatible with the first type, the selectively terminating step including terminating

execution of the operations subsequent to the prescribed location and removing the first data from the first data structure.

21. (ORIGINAL) The medium of claim 20, wherein the initiating step includes executing the prescribed sequence of messaging operations for a voice message as the first type.

22. (ORIGINAL) The medium of claim 21, wherein the selectively terminating step includes terminating the instance based on detecting that the prescribed variable, specifying a voice over IP protocol message, specifies a call rejected condition.

23. (CANCELED).

24. (PREVIOUSLY PRESENTED) The medium of claim 22, wherein the detecting includes identifying the incoming message as a facsimile message as said second message type.

25. (ORIGINAL) The medium of claim 20, wherein the removing step includes deleting a recorded message as the first data from the first data structure.

26. (PREVIOUSLY PRESENTED) The medium of claim 25, wherein the selectively terminating step further includes adding a log entry indicating deletion of the recorded message prior to storage within a subscriber message store, based on detecting that the prescribed variable specifies a detected difference between the first type and a detected type having been identified as said second message type.

27. (ORIGINAL) The medium of claim 26, wherein the first type corresponds to a voice message, the method further comprising setting the prescribed variable to not perform the prescribed sequence of message operations based on detecting that the incoming message is a fax

message.

28. (ORIGINAL) The medium of claim 20, wherein the selectively terminating step includes halting operations for transmission of a message, recorded during execution of the instance, into a subscriber message store.

29. (ORIGINAL) The medium of claim 20, further comprising instructions for performing the step of selectively completing execution of the messaging operations, including transmission of a message recorded during execution of the instance, based on an absence of the prescribed variable being set upon the instance reaching the prescribed location in the prescribed sequence.

30-34. (CANCELED).

35. (PREVIOUSLY PRESENTED) An application server for executing a messaging application, the application server including:

means for receiving an initiation request and first data from a gateway configured for receiving incoming Voice over IP calls, the means for receiving configured for receiving the initiation request via a Voice over IP call control channel between the application server and the gateway, and the first data via a Voice over IP media channel between the application server and the gateway;

means for initiating an instance of an application process configured for executing a prescribed sequence of messaging operations for a first type of incoming message, in response to reception of the initiation request by the means for receiving of the application server, the means for initiating configured for writing the first data into a first data structure that identifies information based on execution of the instance; and

means for selectively setting a prescribed variable based on the application server receiving a reject message from the gateway via the Voice over IP call control channel;

the means for initiating selectively terminating the instance prior to completing the sequence of messaging operations based on detecting, at a prescribed location in the prescribed sequence, the prescribed variable set during execution of the instance and that specifies the prescribed sequence of message operations are not to be performed based on the prescribed variable having been set to specify that the incoming message corresponds to a second message type incompatible with the first type, the means for initiating terminating execution of the operations subsequent to the prescribed location and removing the first data from the first data structure, based on the prescribed variable set.

36. (PREVIOUSLY PRESENTED) The server of claim 35, wherein the means for initiating is configured for executing the prescribed sequence of messaging operations for a voice message as the first type.

37. (PREVIOUSLY PRESENTED) The server of claim 36, wherein the means for initiating is configured for terminating the instance based on detecting that the prescribed variable, specifying a voice over IP protocol message, specifies a call rejected condition.

38. (CANCELED).

39. (PREVIOUSLY PRESENTED) The server of claim 37, wherein the selectively setting means is configured for identifying the incoming message as a facsimile message.

40. (PREVIOUSLY PRESENTED) The server of claim 35, wherein the means for initiating is configured for deleting a recorded message as the first data from the first data structure.

41. (PREVIOUSLY PRESENTED) The server of claim 40, wherein the means for initiating is configured for adding a log entry indicating deletion of the recorded message prior to

storage within a subscriber message store, based on detecting that the prescribed variable specifies a detected difference between the first type and a detected type having been identified as said second message type.

42. (CANCELED).

43. (PREVIOUSLY PRESENTED) The server of claim 35, wherein the means for initiating is configured for halting operations for transmission of a message, recorded during execution of the instance, into a subscriber message store.

44. (PREVIOUSLY PRESENTED) The server of claim 35, wherein the means for initiating is configured for selectively completing execution of the messaging operations, including transmission of a message recorded during execution of the instance, based on an absence of the prescribed variable being set upon the instance reaching the prescribed location in the prescribed sequence.

45. (PREVIOUSLY PRESENTED) An application server comprising:
an interface configured for receiving messages from a gateway configured for receiving incoming Voice over IP calls, the gateway configured for outputting a first request for initiating a messaging session according to a first message type in response to receiving an incoming Voice over IP call, the gateway also configured for outputting a reject message in response to detecting that the incoming Voice over IP call corresponds to a second message type incompatible with the first message type; and

an application runtime environment configured for initiating an instance of an application process, configured for executing a prescribed sequence of messaging operations for the first type of incoming message, in response to reception of the first request, the instance writing first data into a first data structure that identifies information based on execution of the instance, the application runtime environment including an asynchronous event manager configured for

selectively causing termination of the instance prior to completing the sequence of messaging operations based on detecting the reject message, by a prescribed location in the prescribed sequence, specifies that the incoming message corresponds to the second message type, the asynchronous event manager causing termination of execution of the operations subsequent to the prescribed location and removal of the first data from the first data structure.

46. (PREVIOUSLY PRESENTED) The server of claim 45, wherein the asynchronous event manager is configured for causing removal of a recorded message as the first data from the data structure, prior to storage thereof in a subscriber message store, in response to reception of the reject message.

47. (PREVIOUSLY PRESENTED) The server of claim 46, wherein the instance is configured for generating a log entry indicating termination of the instance based on reception of the reject message.

48. (ORIGINAL) The server of claim 46, wherein the first message type corresponds to a voice message and the second message type corresponds to a fax message, the reject message including a voice over IP protocol call rejected message.

49. (PREVIOUSLY PRESENTED) The system of claim 16, wherein the gateway is configured for sending the first and second requests concurrently for the respective messaging sessions to be executed concurrently.

50. (PREVIOUSLY PRESENTED) The method of claim 1, wherein the selectively setting includes:

receiving the reject message by a persistent asynchronous event manager process executed by the application server; and

setting the prescribed variable by the persistent asynchronous event manager process, in

response to the reject message, prior to the prescribed location in the prescribed sequence.

51. (PREVIOUSLY PRESENTED) The method of claim 11, further comprising:
detecting the reject message by a persistent asynchronous event manager process executed by the application server; and
setting a prescribed variable by the persistent asynchronous event manager process and that indicates the prescribed sequence of messaging operations should not be completed, in response to the detection of the reject message and prior to a prescribed location in the prescribed sequence;
the terminating including detecting, by the instance at the prescribed location in the prescribed sequence, the prescribed variable set to indicate the prescribed sequence of messaging operations should not be completed, and in response removing the first data from the first data structure and terminating the operations of the prescribed sequence subsequent to the prescribed location.

52. (PREVIOUSLY PRESENTED) The system of claim 16, wherein the asynchronous event manager is a persistent application instance executed by the application server.

53. (PREVIOUSLY PRESENTED) A communications system comprising:
gateway means for receiving an incoming Voice over IP call and in response sending first and second requests for initiation of concurrent messaging sessions according to respective first and second message types, the gateway means configured for generating a reject message in response to detecting that the incoming Voice over IP call corresponds to the second message type incompatible with the first message type; and
application server means for initiating, in response to the first request, an instance of an application process configured for executing a prescribed sequence of messaging operations for generation of the messaging session according to the first message type, the application server means configured for writing first data into a first data structure that identifies information based

on execution of the instance, the application server means having an asynchronous event monitoring means configured for causing termination of the instance, including removal of the first data from the data structure, prior to completion of executing the prescribed sequence of messaging operations, in response to reception of the reject message.

9. Evidence Appendix

[No evidence attached]

10. Related Proceedings Appendix

[No Related Proceedings]